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Narrative Through Texture

shaping sound through abstract painting
in my practice of ambient music

A thesis submitted to the University of Huddersfield
in partial fulfilment of the requirements for
the degree of MA by Research

Zeger de Vos
University of Huddersfield
School of Music, Humanities and Media

January 2017

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List of Submitted Works

Exgrain (2016) - for Violin and live electronics 13'35"

Hallers Routine (2016) - for Cello, Dancer, Kinect and Live Electronics 7'50"

Expired Sceneries (2016): 32'46"

1. Parallel Memories 8'50"

2. Northered 6'17"

3. Edgelines 8'57"

4. Forgotten Summer 8'42"

Total time: 54'

List of Submitted Items

Exgrain (2016) - for Violin and Live Electronics

Score

Recording of performance

Hallers Routine

Performance patch

Recording of performance

Expired Sceneries

Northered

Parallel Memories

Forgotten Summer

Edgelines

Audio Examples

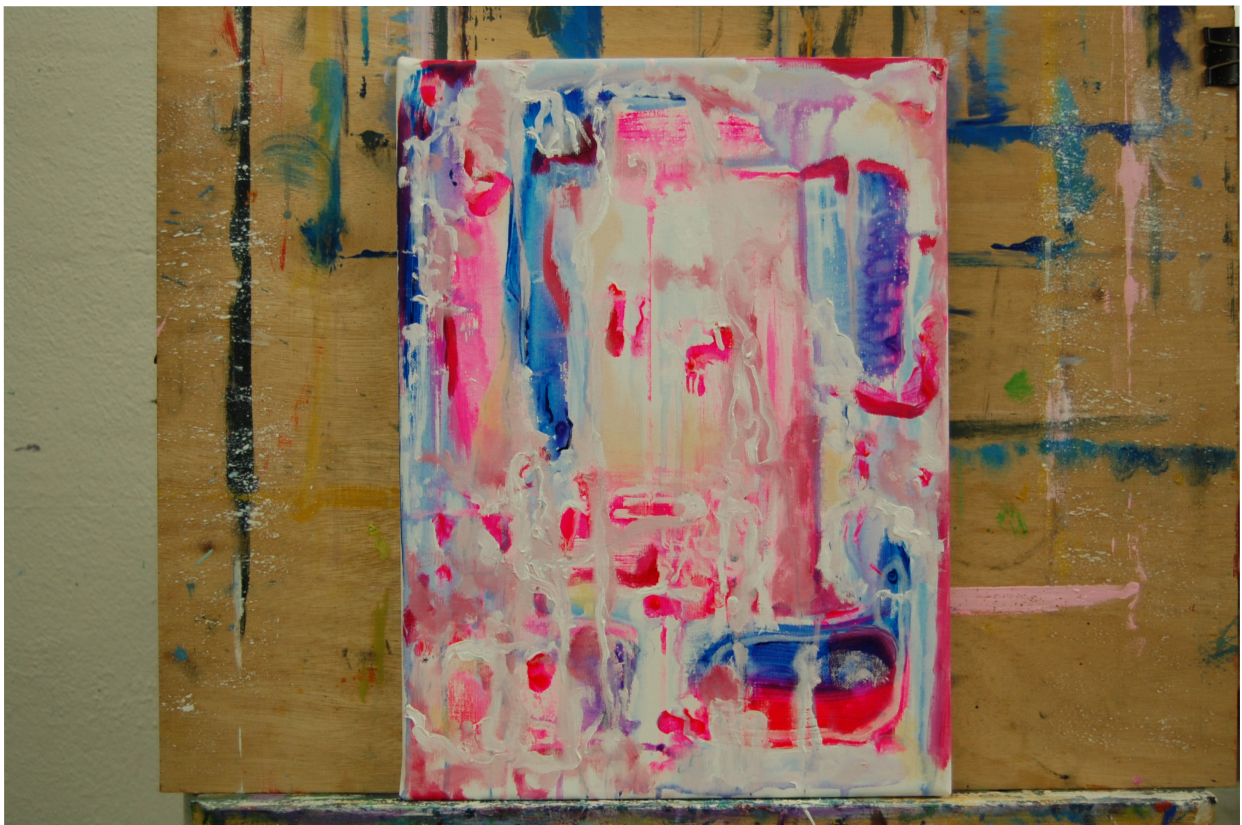
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Painting 1 / Northered



Painting 2 / Parallel Memories



Painting 3 / Forgotten Summer



Painting 4 / Edgelines

Abstract

In an aesthetic of ambient music, this research investigates the creation of musical narrative through texture. The author finds varying results by experimenting with two ways of shaping sound; shaping sound with the use of controllers and designing sound through the aid of abstract paintings. This research focuses on the collaboration with Dutch painter Martijn den Ouden. The author discovers meaningful similarities between den Ouden's abstract paintings and his music and derives novel compositional ideas from strategies in musical mapping. These ideas are explored in the accompanying album *Expired Sceneries*, a collection of four pieces, each relating to one of the paintings. The strategies involved in the process of composing this album are discussed and evaluated in this submission with the help of audio examples.

Acknowledgements

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1 Research aims

This research concerns the main question: How can abstract paintings provide meaningful strategies for creating narrative in ambient music?

The following subquestions emerge:

- What are my meaningful aesthetic motivations?
- What material do I work with?
- How can intuition and immediacy through shaping sound with controllers be meaningful?
- Which characteristics of abstract paintings are meaningful to consider?
- What strategies for textural relationships can be set up?

The evaluation of early experiments in shaping sound with controllers, through the pieces *Exgrain* and *Hallers Routine*, are the springboard to the core of this research. They bring out the main drive to search for a new way of designing narrative. Through 4 abstract paintings, "*Expired Sceneries*" (2016) a 4-track album is composed and its results are discussed.

2 Aesthetic Concerns

2.1 Motivations

2.1.1 Perception of Time, Loss of Self and the Sublime

Emmanuel Kant mentions the Sublime as something that is “absolutely great” (Kant, 2013). To clarify this further he gives us an example of watching the destructive force of a storm while sitting comfortably at home. Or as Jeremy Gilbert-Rolfe describes it in modern disaster cinema: “The pleasure of terror coupled with the possibility of cuddling” (Gilbert-Rolfe, 1999). This contrast between dread and enjoyment is the strongest driving force of my music. By creating atmospheres of contrasting forces like hope and sadness or comfort and terror, I form a narrative. I place sounds that I find beautiful for their individuality (field recordings) or craft (sound design) in a complex space and create frictional counterpoint through opposing sonic qualities. The sublimity in the combination of a clear night sky combined with a realization of the likes of Kubrick: “The most terrifying fact about the universe is not that it is hostile but that it is indifferent” (Phillips, 2001) is a sensation I try to evoke in my work. A sublime experience aids to the experience of a loss of self through the awe of a phenomenon.

I grew up with a physics teacher as a father, who told my brother and I stories about how astronauts return relatively younger from a mission than they would have been had they stayed on earth. This is called time dilation. My fascination for this and other mysteries of the universe survived throughout the years. If you look up into the sky, do you look down into the abyss? The questions that meander through the nothingness of space give me inspire me in a spiritual way. The suspiciously still and tranquil vastness wherein time stretches between gravitational forces and dark matter acts as a cloaked catalyst inspire me to replicate similar structures in my music. The realization of being infinitely small relativizes existence and a sense of self, or ego, diminishes. Being immersed in Roly Porter’s futuristic, destructive drones like “*Giant*” (Porter, 2013, track 5) and his collaboration with MFO’s apocalyptic visuals during a performance at Rewire in the Hague in 2016 have been my closest encounters to experiencing similar sensations of vastness, complexity and sublime forces. I try to achieve the same organic movements and textures that I find in Porter’s music. However, the oppressive energy in this style of music (often described as ‘Power Ambient’) through heavy use of distortion, leaves little space for tranquility and introspection. In my music, I use the oppressive qualities I find in Power Ambient for narrative purposes, but not as an essential part of the aesthetic.

My continuing interest in time manifested itself in the form of rhythm. When I started playing drums, time became something to juggle with. Polyrhythmic patterns, half-time or double-time, uneven time signatures and groove were all different approaches to organizing events in time. I played mostly jazz; music that is improvised and open. It is the moment during a solo for example

where I escaped reality and entered a zone where I didn't seem to exist, every limb worked by itself. This musical experience, or flow-state, brings me closest to losing my self. Performing and improvising creates a state of flow by proposing a challenge to the musician. This flow-state is a condition where a sense of time vanishes completely.

"flow-the state in which people are so involved in an activity that nothing else seems to matter" (Csikszentmihalyi, 1991, p3).

In this state the mind is so occupied with this activity that there is no space left for other thoughts. These experiences of forgetting ego and surroundings have been the most blissful in my musical life. When I experimented with electronic music by purchasing second-hand analog synthesizers during and after my bachelor's degree, this intuitive feel always had an important role in the process of making music. I started composing with a desk of a lot of hardware synths, outboard effects and controllers, processing the signals in Ableton Live. During this research I discovered how this way of working didn't always give the best musical results.

Minimalism was a big first influence in experiencing the loss of self. The repeating patterns in for example Steve Reich's *"Six Marimbas"* (1986) and its intrinsic quality to actively shift my attention to certain layers to discover new relations between pitches and rhythms had a very hypnotizing effect on me. These repeating (polyrhythmic) patterns are a common technique in my music.

Listening to this static and slowly evolving music through subtle changes and the ability of the music to drift me off in introspection and forget time completely, I wanted to create a similar effect when composing my own music. One of the artists I discovered at that time was William Basinski, who uses repeating phrases, or loops, to create a similar moods. His *"Disintegration Loops"* (2012) uphold the beautiful melancholy in decay, or the impossibility to return to the past.

"I started tweaking the synthesizer to make a new piece, came up with the random arpeggiated French horn sounding pattern and started recording. I went to get some coffee, came back and realised that... 'Something's changing, what the hell is going on?' I looked at the loop and I could see that there was dust in the tape path, the tape itself is starting to disintegrate. (...) Over the period of the hour, that melody just decayed right in front of my ears... and eyes. So I was just... tweaking. I set up the next loop on there and they all came up in the order that they are sequenced on the records. And each of these things did their own thing in their own time. And by the time of the second piece when that started decaying, I remember thinking, 'This is not about you. You don't need counter melodies. Keep the recorders going and let's see what's going to happen here. You don't need to add a thing' (the Quietus, 2012).

Basinski's work lacks dramatic changes or clear events that mark a new section. On the contrary, his work is like the slow development of a nonlinear force, gradually destroying the sonic contours of the music. Other music that involved electronics and loops that influenced me is the the music that resulted from the 'Frippertronics' of Robert Fripp and Brian Eno used on *"The Heavenly*

Music Corporation" (Fripp & Eno, 1973, track 1). Combining reel-to-reel tape recorders they created an analog delay system as core driving force of the music. Delay is one of my key techniques. One of my instruments is a Korg Monotron Delay, with an analog circuit that self oscillates, creating distorted, screaming resonances. With Eno, especially his "*Apollo - Atmospheres & Soundtracks*" (1983) but also his more generative work, it was the first time I started making ambient with techniques based on randomness and intuition. Eventually I became increasingly more interested in ambient music like David Sylvian and Stephan Mathieu's "*Wandermüde*" (2012). Their use of drones and distortion are techniques I also incorporate in my work. Through David Sylvian I subsequently discovered the beautiful guitar driven, distorted ambient music of Christian Fennesz through the film "*Shirley, Visions of Reality*" (2013), a film about the works of Edward Hopper.

The similarity between minimal and ambient music is the powerful experience of introspection through creating dense textures of sonic layers. Ambient music for me is one of the strongest aesthetics for creating a sublime energy. Through its complexity, virtual spaces and textures to me it symbolizes the unknown of the universe.

When I was Hiking in Iceland and immersed in desolate places of black sand, coloured mountains and moonlike surfaces. Here, my sense of self was diminished to a level where I was overpowered by the immensity of the landscapes. The lines, curves and colours of the landscape synaesthetically acted in my mind as visual representations of the ambient sounds of "*Abandoned City*" by Hauschka (2014) and "*Atomos*" by A Winged Victory For The Sullen (2014) that I heard through my headphones. The possibility of getting lost and devoured in this indifferent landscape was now combined with a music that was intended to sooth me. It created an utmost experience of sublime transcendence. The calm character of nature, slowly, organically changing over time and through seasons, is something my music mimics in the development of sounds over time. I could trace the layers in my music back to the layering of minerals forming coloured sand, or the depth in rows of mountains. Uniquely crafted sonic textures in my music symbolize the unique phenomena of specific locations like Obsidian, geothermal holes and the smell of sulphur.

Melancholy is an emotion that is a thread in throughout the music I listen to and compose. It rises from a balance between hope and sadness, a "negative beauty" (Demers, 2010, p102). Through melancholy and sublimity I find a way of altering the perception of time of the listener and creating a sense of loss of self. For this reason, my music consists mostly of creating a suspense between minor and major harmonies.

2.1.2 Imprinted Time and the Sonic Object

The power of cinema to create atmospheres has been a major influence in my music. The works of Andrei Tarkovsky are slow-moving films where reality, dreams and memory coincide and perception of time changes. Time and memory are two themes explored throughout his career and

his films radiate a strong feeling of nostalgia and melancholia, a result of blurring the lines between the past and the present. He explains in *Sculpting in Time* that not storyline or actors, but “time, printed in its factual forms and manifestations” (Tarkovsky, 1986, p63) is the principle material for the director to work with. The narrative is a result of a sculpture of images, that connect through an underlying timeframe.

“Time, imprinted in the frame, dictates the particular editing principle; and the pieces that won’t edit - that can’t be properly joined - are those which record a radically different kind of time” (Tarkovsky, 1986, p117).

My work embraces this philosophy. My field recorder, like the camera of Tarkovsky, is always pointed towards sounds that behave slowly, develop organically, or sound static. I record the perceptual slowness within a sound.

Paradoxically, Granular Synthesis is a key technique in my work that enables me to take hold of time within a sound and construct a perception of time. With this type of synthesis time is a malleable parameter that controls the position in time of the sample, the duration of the grain and the speed of playback. This enables me to create a large variety of sonic qualities on a high level with just one recording or ‘frame’. Although this is contrary to recording a sound with a specific ‘time-quality’, I am able to construct sounds with a desired sound quality by manipulating it in the time domain. In *Expired Sceneries* I extensively explored granular synthesis to create otherworldly sounds and textures, alienated from their origins, while also using recordings with specific time qualities.

The *objet sonore* is, according to Pierre Schaeffer, a sound whose origin a listener cannot identify. Pierre Schaeffer talks about the act of reduced listening, which removes the tendency to look for a sound’s origin and listen to the acoustic qualities of the sound itself (Demers, 2010). “Post-Schaefferian electro-acoustic and electronica use sounds as symbols or metaphors” (Demers, 2010, p116). In my music I do both: recordings of spaces and certain sounds can evoke an atmosphere, but have an intrinsic set of qualities on their own, regardless their origins. Listen to Audio Example 1, a separate layer of *Edgelines* a recording of fireworks at new years eve in Amsterdam, that encapsulates both the holistic atmosphere of the sound, but also the beauty of singular transient sparks of explosions reflecting on walls of a huge space within the sound. Often I obscure the origins of a sound by processing techniques or superimposition by other layers. This way I maximize the intrinsic qualities of a sound to bring out its purpose towards the composition. Audio Example 2 first shows a heavily filtered recording of a subway, one of the layers in *Northered* where its low frequency characteristic fits the purpose of creating a multitude of sounds that cover a large range of the frequency spectrum. The second part is the unprocessed recording.

2.1.3 Instability, or the Human in the Music

“Time, and the effort to save his music from time, destroyed Basinski’s music” (Demers, 2010, p63)

Being a studio-composer means working with equipment and circumstances to record anything without unwanted noise. However, the material I record eventually almost always falls prey to some form of distortion. Inspired by post-digital glitch techniques that deliberately introduces failure into technology, for example by painting images on the underside to make them skip (Cascone 2000), I process sounds to create mangled versions of the original. Audio Example 3 shows a glitchy piano sound, made with granular synthesis and processed with filtering to create a lo-fi feel.

The idea of something being unstable appeals to me a lot. It is a key concept in my work and branches out into different contexts: material, process or motivation. When material has sterile, rigid elements, such as perfect pitch, or too constant parameters, I am always looking for ways to manipulate those. Improvisation, an approach which often embraces imperfection, shares with glitch aesthetics the power to introduce uncertainty into a process which is either too predictable or too rigid. It allows for ‘happy accidents’. This heightens a sense of flow in composing by controlling the amount of malfunction in performing to explore the boundaries of freedom in relation to the concept.

Instability could manifest itself in a literal sense. For example, in the recording of squeaking old wooden floor or door. It implies that the floor is not well installed or that the door is not well oiled. But it can also be the artefacts of an old reel-to-reel tape machine, where the sands of time have taken hold on the efficiency of the machine thus adding saturation, grittiness or pitch instability. It brings me rather excitement than annoyance when room temperature influences the pitch of an analog synthesizer. Instability, insecurity and fragility are the foundations on which my music is built. In Audio Example 4 there is an iterative texture in the forefront based on a recording of a person analyzing an unfamiliar object. This to me resembles a kind of curiosity, vulnerability and experimentation. The human, seemingly random, movement that shapes the sound creates a suspense, because we as a listener do not know what this person will do to the sound. This exhibits both tension and a humanized feel.

2.2 Material

2.2.1 Field Recording

A large part of my work is a combination of field recordings and processing of those recordings. The field recordings enable me to work with unique sounds, recorded in unique circumstances. This process enables me to capture unpredictable sounds that exist around the sound I am recording. I often transform sounds far from their origins to create textures with only glimpses of their original form. A similar approach can be found in the works of Christian Fennesz’ *Bècs*

(Fennesz, 2014, track 5) in which he ‘subjects conventional acoustic or electric instruments, often the guitar, to heavy distortion that can be likened to listening to music through a waterfall or an ocean’ (Demers, 2010, p64). To establish a similar sense of instability, or lo-fi, I mainly use filtering, compression and saturation. Filtering of high frequencies can create a sense of reduction in quality. Youtube videos with low definition usually sound as if the high frequencies are cut off. I create similar effects with plugins that reduce the bitrate or allow me to gate certain frequency spectra. Sonic artefacts are minuscule errors that arise during recording. Raising those artefacts of a sound with a combination of saturation and compression I create an oppressive sensation and therefore a super close-up with the sound as heard in Audio Example 5.

I used filtering as well to create estrangements of the sonic original, with either harsh dips or spikes in frequency areas. Audio Example 6 is a sound which has two frequency spikes at 275 Hz and 2 kHz to create a harmony within the sound that, although imperfect or distorted, fits within the other layers. Other ways of creating a glitched sound in *Expired Sceneries* involved an effect called ‘beat repeat’, which repeats short selections of a sample randomly.

A lot of sounds on the album are sounds recorded in and around Huddersfield. The massive interior of St. Pauls Hall and its reverberation, opposed to a close-up recording of a rattling fence in the fields of the Peak District or the ambience of a windless night all contribute to establishing a sense of location. A place is a unique mixture of all the sonic events happening in that place and creates a sense of uniqueness. I often introduce familiar and recognizable sounds to a complex context of unfamiliar sounds to create suspense. For example, I recorded myself moving stones in a bunker in the dunes in the Netherlands, this can be heard in *Parallel Memories* at 1.10. These have a unique spatial sound. The ambiguity between this humanized sound and its embedding in a complex collage of synthesized notes and processed recordings, creates a friction between real and imaginary.

Recording in the field invites me to discover complex sounding environments or minuscule microsounds within them. As Chris Watson explains in the documentary ‘The Colour of Sound’:

“That’s one of the things I find really exciting and satisfying about recording, is to be able to come to locations like this and draw out individual sounds from very close perspective, but also to stand back to get this large soundscape of a particular sonic environment. (...) no two oceans or seas sound the same” (Watson, 2013).

However, I don’t consider my music as soundscapes. I “abstract found sound in order to recontextualize them in musical works” (Watson, 2013). This is because although field recordings hold the possibility to present aspects of reality, I agree with Francisco López when he says that “field recording is essentially a creative way of interacting with reality, rather than ‘representing’ reality” (López, 2013, p101). The pieces of *Expired Sceneries* are virtual worlds, where recordings from different places and different perspectives coincide through the intrinsic qualities they inhibit.

2.2.2 Synthesizers

The more harmonic material in my music comes from synthesizers. Most of these have an analog circuit inside the machine, producing a sound that is, on a subtle level, never the same. The two EMS VCS 3s, that the University of Huddersfield houses, are used on *Edgelines*. These musical machines enable me to explore different kinds of sounds on an intuitive and hands-on approach. My synthesizers of choice have a lot of knobs on them that enable me to have the most control possible in sound design and welcomes to explore the possibilities within a sound. This is important to create room for intuition, to explore what I haven't thought about and to manipulate a sound's characteristics dynamically and physically to create an organic sound. The behaviour of sounds on this album are either in the realm of characteristics like iterative/glitched/fractured/entropic, or in the realm of organic, slow-moving characteristics like sustained/lethargic/static.

Controlling the parameters of the ADSR of a synthesized sound can move a sound between these two categories quite easily. Imagine a slow attack, long release versus a short attack, short release with the addition of a random arpeggiator. The first one sounds static and slow, while the second one sounds iterative and unstable.

Modulations on effects with LFOs provide useful ways to controlling fundamentals of a sound. With it I created the gestural filtering pattern on a cymbal sound in Audio Example 7 for example.

2.2.3 Microtexture

I have a fascination for microscopic sounds. Their physical transients tickle your eardrums and they can imitate the grittiness of the artefacts of an old vinyl, symbolizing instability and fragility. Their delicate characteristics symbolize a certain magnification of an otherwise unnoticed entity. Working with these "elementary particles" (Demers, 2010, p71) enables me to recycle used sound and reintroduce it in different forms. This is useful for connecting different sections of the piece together through memory. Audio Example 8 shows how I granulated a piano sample to create a static piano sound with fluctuating volume. It enabled me to extend the sound of the piano to slowly fade out unnoticeable. Moreover, because this sound is already heard, I don't need new musical material to bridge this gap.

I designed Audio Example 8 with a compositional tool which I built called *The Stippling*, a granular synthesizer, which is a reference to a painting technique where the whole of the painting is made from multitudes of dots. I was able to infinitely sustain a sound, by repeating grains in the small region just after the attack of a sound. I made nebulous, crackly, glitchy or other textures with the same material, based on different combinations of the parameters of *the Stippling*. This made an organic shift between different states of a sonic entity possible. In Audio Example 9 I increase the density of granulated pizzicati while adding reverb to transition from an iterative into a cloudy texture.

2.3 Shaping sound

2.3.1 Sustain, Space and Layering

My musical material is a layering of sustained sounds, interrupted by iterative or glitchy textures arranged in a complex space. I use space as a way of obscuring the perfect form of sounds towards an ambiguous versions. With no space, a sounds is in its 'sterile' (anechoic) form, when placed infinitely far, the acoustic qualities shape the sound and give it a new meaning. I use reverb dynamically to raise sounds that are 'buried in reverb' from obscurity towards more clarity to create meaningful movement in a piece. Audio Example 10 moves from far away to close using reverb dynamically. Although I use dynamic spatial organization of sounds like panning to create a sense of space, I actually almost never use reverb as a tool to achieve a realistic space. Different spaces are often heard simultaneously; in Audio Example 12 I superimpose spaces with different dimensions on one sound to create varying timbral results. By controlling the volume of each layer subtly, I change the timbre of the sound and its spatial quality. This is why when I want something sounding 'as if in a bathroom', it is not the metaphorical visual representation I am after, but the chorus-like effects that occur due to short reflections off the small space which create its specific timbre. Therefore I use reverb as a tool to modify a sounds duration, timbre and relation to other layers in the sonic environment.

Sustained sounds vary from synthesized notes with a long release time, to a more metaphorically sustained sound like the perpetual motion of waves collapsing on the shore, the noise of a seemingly silent room or looped sounds. Granular synthesis introduces the possibility to create a sustained version of a non-sustained sound. Just shortly after the attack of a sample all the spectral characteristics are intact. Superimposing grains in that region of different duration and location in the sample creates a sustained texture of the character off the sound without having the attack. Another way to sustain a sound is to use reverb to position sound in a virtual space like a hall. This blends the original or 'dry' sound with the reflections of the space. A cathedral for instance, can have a reverb tail of twelve or more seconds. In my music I use the reverb drastically to get unusual long reverb tails or unreal large spaces to create this sustained effect. The two Synthi EMS VCS3s I used on *Edgelines* both have a spring reverb inside. This adds a fluctuation in pitch to the sound, accompanied by a longer release and a decrease in clarity. I connected both of them to double the effect to create an unusual long decay and unstable sound as heard in *Edgelines* (Audio Example 11). Another technique used to sustain a sound is delay. This effect repeats the original sound with a timed delay and varying amounts of feedback. I created a reverse delay effect in Max that reverses the incoming sound before it delays it, to create otherworldly versions of processed sounds.

The layering of sounds is very important in my music, as it enables me to design the impression of a stream sound. Bringing layers to the forefront through increasing volume and decreasing amounts of reverb can create a completely different texture with the same material.

“The evolving streams within such a piece might be continually changing their timbral characteristics, even though they were continuously connected to the opening event (i.e. the piece need only have one attack - at its opening - and therefore in the conventional musical sense contain only one ‘note’)” (Wishart, 1997, p25)

This idea of being able to infinitely change a sonic object’s characteristic appeals to me in a sense that I can create different sections in a piece based on organic morphology of existing sounds into new states. The way I organize layers over time has to do with the timbral counterpoint between them and how dynamic change of their parameters contributes to a meaningful development of narrative.

2.3.2 Composing through Intuition

“A largely unconscious, spontaneous expression of inner character, the non-material nature. This I call an Improvisation” (Kandinsky, 2010, p80).

Because of my improvisational background, a certain amount of artistic choices are based on intuition. This includes mostly considerations about rhythm and harmony. I generally work with modes. The timing of events in the music are not driven by a rigid framework, rather, the moments in the music where something occurs is a collaboration between concept and ‘feeling’.

“it’s going to bring an added dimension - of aliveness - to a composition and bring the musician into a greater intensity of working on that piece” (Bailey, 1980, p65).

It can take a lot of experimenting for when it is the right time for an event to occur. For example, a certain tonal establishment like a mode can only be altered unnoticed if enough time has passed for our memory to have forgotten its fundamental notes. It is not easy to move between major to minor mode quickly without a feeling of disorientation. But if I move slowly between notes to eventually reach minor mode, I can change a tonal color with avoiding a break in flow. Bass notes are often held for a long time to establish a fundamental for the notes above. A change in the bass note will also change the overall colour, or mood. The moments where this happens are either anticipating a change in the music (in which case the change is based on intuition) or a reaction to a change in music. In the latter case, the change in bass note is a result from a changes in textural layers of the music.

2.3.3 Teleology and Vertical Time

In his article about his influences for *Five Panels (no. 5)* (2009) Monty Adkins quotes Jonathan Kramer about this type of music as displaying vertical tendencies. Kramer writes that,

“Vertical music denies the past and the future in favor of an extended present. The past is defeated because the music is in certain fundamental ways unchanging, nonlinear, and ongoing... there is little implication toward the future in this music, other than that it will continue, largely as it has been... this kind of music tries to create an eternal now by blurring the distinction between past, present, and future, and by avoiding gestures that invoke memory or activate expectation... Music in vertical time can provoke intense and unusual responses... it gives us the means to experience a moment of eternity, a present extended well beyond normal temporal horizons...” (Adkins, 2008).

This vertical music enhances the active listening experience and therefore flow through this eternal now. In *“Rusted Oak”* (Deupree, 2010, track 2) you can experience something Deupree, mastering engineer for *Expired Sceneries*, calls:

“a vertical approach to sound” (Deupree, 2010)

He continues by saying that this approach,

“is more interesting to me than a horizontal or linear one. I want to try to take time out of the equation and concentrate on the moment. ” (Deupree, 2010).

My music does sometime have sections of vertical time, for example in *Edgelines*, but it maintains a strong sense of narrative. Instead of leaving the listener to “bliss out” (Adams 2009), I try to continually create a sense of expectation and therefore an active listening experience. I do this by a chain of cause and effect between changes layers. The predominant sense of stasis is subtly interrupted by events that usually have a certain amount of anticipation. This anticipation is mainly based on increases or decreases in volume. This way the organization of layers can be altered to create an expectation. This happens mostly in *Northered*.

By making the bell melody return at 4.00 of *Parallel Memories*, albeit in an altered shape, I create connections between different moments through the memory of the listener and therefore a sense of narrative.

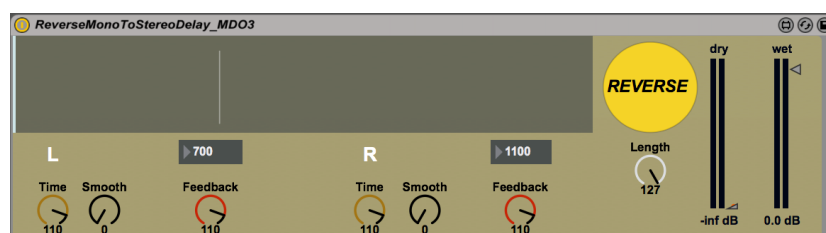


Figure 1

Figure 1 shows a delay effect I built in MAX. Apart from using it in real-time as a way of sustaining sound, I used it to create distorted versions of the original sound. This way I can connect different moments in a piece through blurred memory with different alterations of a single sound.

3 Early Experiments in Shaping Sound

3.2 Shaping with Controllers

This research initially started out from the idea of shaping sound through physicality and improvisation. These two concepts were the main focus at the beginning of this research. I found out through some experiments with a Leap Motion, the Kinect in *Hallers Routine* and live electronics in *Exgrain* that the problem of creating interesting narrative wasn't so much solved in the process of shaping sound while performing, but in the strategies for narrative structures. I found it very difficult to create an aesthetically successful piece combining live electronics and algorithms incorporating probability in *Hallers Routine*. I moved on from this live setting and started creating *Expired Sceneries*. I want to briefly show the process of moving from a live situation to a studio setting.

3.2.1 Exgrain

Inspired by the fragile, reductionist works of Jürg Frey, for example his "*Streichquartett II*" (Frey, 2006, track 5), this piece was an exploration in time, timbre and improvisation. Following themes of reduction, fragility and memory I created a performance for violin and live electronics. I used granular synthesis to realtime record and repitch the sound of the violin.

The main idea of the piece was to create organic development within a sonic texture that was made out of a fusion of acoustic and electronic sound. Timing and silence were key mechanisms of development. The piece moves very slowly and time between notes of the violin is relatively large. The imperfection in this piece lies in the fragility of the violin, playing pianissimo, senza vibrato and delicato. Apart from that, there are moments of free interpretation in the score.

The electronics are intended to be equally loud as the violin to create an ambiguity between the real and the virtual. The violin plays long notes, emerging from - and dissolving into silence. In these intermissions of 'nothingness' the added crackles in the background embedded in a virtual space by the electronics create a sense of magnified silence.

The piece was the first exploration into shaping sound using granular synthesis. I worked mostly with Robert Henke's Granulator software plugin to transform recorded pizzicati towards pad-like clusters as can be heard in Audio Example 9. This also was the first piece I used the Reverse Delay tool (Figure 1). I composed reversed versions of a phrase from section one (bar 135), that were played back in reverse, creating the actual phrase from section one, but with a different

timbre. This way I created structure through memory. I was able to modify the delay time by minuscule proportions, to create microtonal fluctuations, which emphasized the instability, fragility and thus imperfection. In section three (bar 100) a drone with a low frequency is introduced to create a large gap in register. This is to create a stark contrast between the two voices as opposed to the first section where they are perceived as a single stream. I was happy with the aesthetic results, it carried a sublimity through the force of the low drone and the fragility of the violin. I had many technical issues, which prevented a part of the liveness in the piece. The computer couldn't handle the live recording of the violin, so in the end I worked with prerecorded samples of the violin which I triggered during the performance.

3.2.2 Hallers Routine

This is a piece for dancer, cello and electronics. The project revolved around physically changing the texture of sound. The aesthetic aim was to create a dense layering of sounds which would be organically altered by a dancer. The piece was largely based on a concept of time; I divided the piece in two timezones: night and day. The night time (1.45 - 2.00) has a duration of 10 seconds. During this time, the walk of the dancer is captured by a Kinect. The X-position of the dancer stores the way recordings of objects or synthesized notes of a certain frequency-range will be played back during the day time. After night time comes daytime, where those samples are played back based on the walk in the nighttime. Different combinations of physical gestures from the dancer trigger effects and manipulations of the sounds. For example, both hands on the head of the dancer trigger distortion, the left hand above the head triggers a new sample (2.13) and acceleration of the left hand triggers a delay. Real-time granular freezing, filtering, reverberation and distortion are all linked to (combinations and accelerations of) gestures. Filtering, based on the Y-position of the body, can be heard from 0.54 - 0.58. For this particular performance, the piece was divided into five sections of each 1.5 minute, but the duration of night- and day time can be adjusted to extend or shorten the overall performance.

The interesting part here was that the piece embraces openness and instability by the addition of the element of risk through the generative way the sounds are triggered and altered using physical gestures of a dancer, who behaves intuitively.

The unsuccessful part of this project was that the aesthetic aim wasn't met. Although the narrative is based around a concept, the piece sounded generative. This was mostly due to repetitions of sounds, simple effects and the lack of development within sounds. The layering was quite transparent and the physical shaping of sound was gross instead of subtle, due to bad decisions in mapping effects to movements. One of these is a decision to have a filter on all sounds with one movement. This quickly becomes boring after two instances.

Slowly I began to realize that in order to create interesting development over time, I needed to design strategies to create musical gestures within a sound, and control more carefully their holistic

meaning and aesthetic. A studio approach would allow me more time in designing complex development within a sound in relation to other layers. I would be able to create dense, complex layering and decisions in musical development would not be arbitrary and gross, but more sophisticated and subtle.

4. Sound from Paint

4.1 An Unusual Score

Looking for a way to design useful strategies for designing narrative in my music, I stumbled upon the work of Dutch painter and acquaintance Martijn den Ouden. Martijn's work varies from making collages to buttons to making abstract paintings. His paintings are a dense, heterogenous and complex arrangement of shapes. The variety of shapes in his work is extensive. They differ from straight lines to interrupted forms, nebulous or pointillistic shapes, or fusions of multiple textures. Looking at the works, noticing the layering and amorphous forms, I could immediately imagine how these forms could be mapped to musical parameters. I like the expressivity and experimentation that radiates from the paintings by using different kinds of paint and energetic gestures as essential elements. The recurring deliberate drips of paint, introduce an unpredictable and playful element to the paintings, similar to mechanics of surprise I incorporate in my music, like randomness or unforeseeable sounds in a field recording.

The paintings consist of multiple layers of texture, analogous to the layering of sonic textures in ambient music. The experience of being immersed in a complex arrangement of musical layers via the ear also counts for the eye when one looks at these paintings: zooming in on certain areas of the painting exposes how textures are for example superimpositions, fusions or have other complex relations to one another. Zooming out can give a completely different perspective and experience. This way of actively looking at a painting and its characteristics is similar to a state of active listening by separating individual sonic layers in a piece of music. Immersion in this activity creates a state of flow.

I used the paintings as scores and mostly 'read' them in a linear fashion. I searched for aspects of the paintings that I could map to musical parameters. Although I was amazed by the variety of shapes and complexity, assuming there was a large amount of layering, I wondered how the process of layering actually works. I thought it would be interesting if the paintings could be deconstructed into separate layers to see how Martijn decided to paint single shapes, multitudes of shapes or obscure shapes by superimposing layers for example.

My initial approach was with the question: 'Is it possible to make one of these paintings layer by layer?' In this way I could translate the objects in the painting to musical objects and the layering done by Martijn could provide meaningful decisions in layering of my musical material.

The first two collaborative works were done by this layer-by-layer approach. Along the way we decided to create music for the last two paintings working from the finished product. This was mostly due to the fact that although each new layer of paint could provoke a, possibly intended, new relation to the previous layer, this new relationship was an automatic result of the fusion or contrast between them. In terms of music this unavoidable new relationship is not something that happens automatically, but has to be (re)composed. This was very time consuming and frustrating, because each finished musical layer would very likely change or even be removed when the new layer arrived. The second reason was to investigate possible other outcomes in considerations about musical mapping and composing when starting from a finished painting.

I followed the 'score' in the painting through its various characteristics analytically, but gave myself permission to leave enough room for intuition while composing. If the music and my aesthetic aims suffered from rigid concepts that I derived from the painting, I allowed myself to look away and compose from the musical material itself. In other words, certain considerations and conceptual thinking I made about mapping shapes or layers could be overthrown by aesthetic motivations in different stages of composing.

4.2 Distances

In order to create the widest scope of meaningful derivations from the paintings, I approached them from three distances. This concept of distances is something that emerged during the course of composing and proved a very useful analytical tool, but was not something I started out with.

1. **Distant:** This was the farthest viewpoint and dealt with the first impression or initial response to the painting. At this level, I made considerations about general atmosphere/mood and/or character. Decisions about these two are based on overall colour, behaviour of shapes (chaotic or stable) and density within the painting. At this distance the first ideas about instrumentation came to mind.
2. **Intermediate:** From this standpoint I looked at relationships between shapes and recurring patterns in the painting like parallel movements, contrast, repetition or depth. At this level I considered compositional strategies about form and development.
3. **Focus:** This last approach focused on particular shapes in the painting and observations about the construction of their form for the parametric design of a single sound. This resulted in novel ways in compositional techniques and deeper control over sonic development.

The considerations for musical development which resulted in an interesting narrative were based on these three levels of painting analysis, usually from distant to focus. That meant that first there was a general decision about mood or atmosphere, based on the initial response to the painting. Second came the decisions about patterns and other behaviours in the painting. The third

stage was very sound design specific, based on analysis of single painted objects. These could sometimes be so prominent in the picture that considerations about form would emerge from their dominant characteristics. Therefore, compositional decisions based on visual patterns at intermediate level could be influenced, or even overthrown by conflicting sound design of musical objects with its parameters linked to the dimensions of a shape at focus distance. The idea of approaching the pieces from these distances emerged over the course of these 4 pieces. It was a useful analogy to different stages of composing; from conceptual thinking to meticulously shaping sonic objects.

4.3 Composing ‘Expired Sceneries’

In this section I will discuss each painting and its corresponding piece. I will look at each painting chronologically from the discussed distances and will make musical considerations based on those.

4.3.1 Painting 1 / *Northered*

Distant

I knew from the beginning that the painting would eventually become very dense, knowing Martijn’s other work. I decided to gradually add more and more layers in between stages of the painting. But because the music was taking shape analogous to the painting (layer-by-layer), there was not really a distant view from the painting to work with until a later stage. There this distance became more of a revision of the work in progress. In the final stage the painting had an overall chaotic structure, consisting of a large variety of colours, although generally radiating a warm, orange color. I initially decided upon a large variety of instruments with different timbres, but eventually went with a preference for low frequency material like bass notes from a synthesizer and heavily lowpass-filtered recordings to symbolize the warm characteristic of the painting.

In a late stage, the painting had obtained a certain pointillistic appearance, albeit with big dots. I decided that a lot of my instrumentation would have a similar characteristic; iterations, short bursts of sound, or fractured sounds.

Intermediate

Martijn called this painting ‘Figuratieve Verrassingen’, which translates to Figurative Surprises, because he told me that there were noticeable shapes to be found in the painting upon a closer look. I was still not able to find any, but I decided to create sounds that would introduce themselves as if they were epiphanies. Like epiphanies, that seem to emerge from nowhere, I reintroduce the sounds in different forms throughout the piece. Audio Example 14 mimics these epiphanies with a

synthesized sound from my virtual analog synthesizer Access Virus B that randomly generates notes with a lot of silence in between.

There is a large sense of depth in the painting, ranging from large, blurred panels like the red one in the top right corner to minuscule groupings of color with sharp edges. I obscure sounds with low-pass filtering and reverb to cover blurred painted objects, with clear, dry sounds I symbolize the sharp and clear areas of paint.

The painting has certain repetitive shapes and structures. Straight lines of spray paint, dripping paint trails and dots or small smears. Behind these layers are long, opaque shapes of red, yellow, blue and you can also see the white of the empty canvas. There is a moment about 2/3rd of the way through the piece where I show the empty canvas in the music, by reducing the amount of layers to near silence accompanied by high-frequency textures. It creates a moment of contrast in space, from wide to narrow. This creates a suspense in the overall narrative. After this moment of near silence I then return to the previous section with the signal of the mallet strike. You can hear this from 3.45 - 4.11.

I collected samples and composed midi sequences that represented sonic layers that seemed fractured or scattered, like the red angular shapes. Certain sections in the painting that contrasted in terms of density or colour, like the centre of the painting and the bottom centre would mean different sections in the music.

Whenever I decided to move to another section in the painting where another colour was more prominent, I would change the harmony by changing the pitch of one or multiple layers. The timing of a change like this was mostly based on intuition. In case of a dramatic change in the painting I would change the fundamental of the harmonic structure.

A decrease in density in the painting would mean a decrease in the amount of sounding layers. Less contrast would be more ambiguity in the music. My usual approach to composing before this project was bridging sections through intuition or improvisation. I intuitively changed notes of different sound sources, and dynamically moved them through the virtual space through volume and reverb. The first versions were based on this approach and turned out quite amorphous. It lacked a clear narrative and I started to look for other approaches. With this painting I attempted to use granular textures as a way to bridge sections of the piece together, just as the red dots seem to group together to form shapes. Whenever I wanted to introduce a new musical section, I preceded it with granular textures of all sorts. This happens between 1.04 - 1.08.



Figure 2

Focus

Figure 2 shows what the first layer of paint looked like. Because of the three colours, I decided to make clusters of three adjacent notes. The lines form angular shapes by being perpendicular. I decided to compose an analogous musical gesture by crescendoing sounds with a static character, followed by contrasting sounds. I made various renders of these gestures, each with different speeds because the dimensions of these shapes vary throughout the painting. Because they are so momentary on the empty white canvas, I wanted them to sound volatile, as if the shapes on the canvas were not embedded enough and vulnerable to escape. At a late stage of composing I decided to only use these textures as signals for new sections. This was because of the atonal quality they had, which didn't fit the harmony of the piece. On the finished painting they were obscured by other layers which made them hardly noticeable. This meant I could conceal these sonic objects within the mix as well. Audio Example 15 is an example of one of these sounds and acts here as a predecessor to a high frequent texture that introduces a new section.

There are a lot of iterative, spiky sounds; field recordings of gurgling geysers from Iceland, or a short mallet note with short, feedbacked delay, to create rippling textures. With these sounds I mimicked pointillistic shapes in the painting like dots and dripping paint lines. Audio Example 13 shows how I used granular synthesis on a bell sound, to create short bursts of sound scattered throughout the stereo image. The red straight lines transition to fractured shapes or dots. To make the musical equivalent, I granulated another bell sound just after its moderately long sustain. Both characteristics are embedded in Audio Example 16.



Figure 3



Figure 4



Figure 5

4.3.2 Painting 2 / *Parallel Memories*

Distant

Although this painting was still, in a way, approached layer-by-layer, the first version was already quite dense (see Figure 3). The two colours red and blue dominate the canvas, with washed out versions of pink, purple and light blue. The dominant colour blue made a dramatic and melancholic impression on me. At that time I was experimenting with prepared piano sounds, which mangled sound resonate a certain melancholy. I had a collection of beautiful recordings of different timbres and dynamics and decided to use them in this piece as a starting material.

Intermediate

I noticed a lot of striking sections in the painting that contrasted harshly in color or shape. I decided to make a piece that would be relatively dynamic to bring out the moments of contrast. This way I challenged myself to create big gestures and dramatic effects. In my music however, I like the kinetic force of the music to be coming from subtlety in texture and slow-evolving gestures.

The unnoticeable development is crucial for avoiding a break in concentration while listening and maintaining a sense of flow. This conflict between push and pull forces was a challenge during composing. I needed to reevaluate what 'dramatic' really means. I went from big gestures in volume and effects to a more subtle definition of dramatic, by focusing on one aspect of a sound and see how far I could stretch the drama in that parameter.

Painting 2 was one where I could immediately separate certain sections through combinations of shapes in the painting (see Figure 4). There seems to be a constant sense of duality: red versus blue, a divide across the length of the painting, shape 2 being sliced in half and shape 1 being a contrast between red and blue again and having some sort of obscured alter ego on the left of the painting (more visible in Figure 5, an earlier layer). The shapes seem to hint towards recognizable shapes like hands, faces or letters, as if they were like blurred memories. I combined this idea of blurred memories with the parallel character of the shapes I found in this picture and called the piece *Parallel Memories*. A lot of sounds return in another part of the piece in slightly altered versions of the original as if altered due the sands of time, similar to how memories decay or distort through time. Often I reverse them, as is heard in Audio Example 17, as if time is reversed within the sound.

The manner in which I dissected the painting into sections based on shapes, determines the structure of the piece. I read the painting from top-left to bottom-left to top-right to bottom right: Following the two pink and blue panels downwards into a section concealed by what appears to be a cloud of white, interrupted by pink dots. I then move towards shape 1, followed by the crescendoing pink line towards shape 2. I focused on shape 1 to create a moment of gravitational force in the music. It marks a clear event at the end of the piece. An obscured version of the same event is heard earlier in the piece. The first event is heard at 3.03 and the second at 7.07. There are two big arcs built around those events. The piece ends at the grey panel at the edge of the bottom.

Focus

The bell like sounds, a repeating instrument throughout the album, represent the scattered pink, angular shapes in the painting. They return after the first event that is anticipated by a crescendoing bass sound. The straight lines are heard as the more static sounds like time stretched audio fragments of crying wolves, clouds of heavily granulated samples and drony air vents. A sound like Audio Example 19, an object analyzed from very close up, represents a person memorizing a time where he was first introduced to a new object. I manipulated the sound with bandpass filtering, heavy compression and distortion, to create a lo-fi appearance. With this I create the effect of listening to an old tape, as if going back in time. This creates a sense of nostalgia, a melancholic longing for a past time.

The piano is not to be heard as a leading instrument in this piece. I used its varying timbral qualities more to glue separate sections together. In Audio Example 10, we hear a distant texture moving to the forefront and being interrupted by the piano. This symbolizes the white, chaotic lines in the top-left which suddenly stop at an almost brown line. The same crescendoing texture being stopped by the piano is heard in the second part of the piece (listen to Audio Example 18), but with other timbres. The last note of the piano is sustained with granulation, to create a dense, static layer of multiple sources.

Shape 2 is made of two strong contrasting colours and signifies a moment of contrast in the piece. This can be heard from 3.28 - 3.35. Initially I created a large, dramatic sound for that event that would contrast the preceding section with the following. This contrast is still intact; the moment after the event is almost silent opposed to the dense fusion of sounds before, but the original event itself was too dramatic to maintain a sense of transcendence. Instead of creating a sort of explosion as I previously tried, I created an implosion with all its high frequencies filtered off. Apart from that, I embedded the sound of the event more in its surrounding layers to reduce the amount of dynamic and create a more ambiguous sound.

The anticipation for these events is partially constructed out of a crescendoing sustained piano sound by granulating the sonic information just after the attack. In Audio Example 20 we hear such a sound.

The section in the piece that covers Shape 1 was an interesting process of incorporating granulation, because of its grittiness, and wavy pattern. I used three layers of granular sounds ranging from low to high frequency range to imitate fading color from light blue to dark blue. Above that is a granulated sample of a render of a section of this piece, with each grain having a bandpass filter with a high Q factor to create a water-like sound. Another layer that is also heard in the beginning and end of the piece mimics the fluctuating pattern in the background with its dynamic panning and dynamic filter.

'Humanized' sounds, like the object you heard in Audio Example 4, are a reoccurring pattern throughout the album. They are like flagships of imperfection. The movement within the sound is as if it is being examined or controlled by a person, existing in another timezone in relation to the rest of the layers. They often pose a contrast to the established space by having a very oppressive spatial characteristic, almost claustrophobic. I create this effect by heavy compression, saturation and filtering. In this way put the sonic object on a stage to deflect the attention of the listener and to give space for other layers to develop. It is as if suddenly I am analyzing myself analyzing the painting.

The piece ends with a coda that represents the grey piece of paint at the bottom. This coda consists mostly out of rendered layers of music that are heard earlier in the piece. I recycle this material through granulation with an amount of distortion and effects like reverb and pitch shifting. This new material creates a sort of distorted memory of what happened earlier on in the piece.



Figure 6

4.3.3 Painting 3 / *Forgotten Summer*

Distant

My first reaction while looking at Painting 3 was that the overall palette is yellow, orange and red, which creates an overall warm sensation. The combination of the warmer colours with blue and green areas created an almost impressionistic landscape of a mediterranean country. Having frequently visited Tuscany with its warm temperatures and cypress trees when I was at young age, this image gave me a nostalgic feeling and I worked from this energy. I decided to work with the idea of a 'Forgotten Summer'. Imagine that ten years from now, current circumstances in ones life could be erased from the memory of that individual, because of its irrelevance to the bigger picture of the lifespan of that person. Only striking details and situations are stored in the hard disk of the brain. The 'Edgelands' of those memories are smeared out.

I decided to map the color spectrum to the frequency spectrum. The instrumentation here consists of a heavy filtered trumpet to resemble the mustard-yellow areas like Kandinsky describes:

"Keen lemon yellow hurts the eye in time as a prolonged and shrill trumpet-note the ear, and the gazer turns away to seek relief in blue or green" (Kandinsky, 2010, p40).

The returning mangled, metallic sound of prepared piano, resembles the distortion of memory and covers the blue and green colours. It also forms a contrast to the brassy sound of the sustained trumpet with separated notes combined as melodies. The dark-brown colours are heard as low frequency sounds. For the white sections I recorded the noise of cymbals being struck. Their sound covers the full frequency spectrum and is therefore similar to the white noise of a recording of the sea. With this I create a blurring line between real and imaginary, just as old memories tend to become embellished with ideas of the mind.

Intermediate

I noticed a lot of parallel lines, wave-like patterns and centripetal forces in the painting. Similar to painting 2, this work has a strong sense of movement. This is mainly because of the centripetal moments that Figure 6 shows in the red circles within the yellow rectangles. I decided that those areas in the painting should represent forces that pull the music forward. The way my eyes follow the motion in the picture is through the lines that bend around those centripetal moments in a wave-like fashion. The most literal way I incorporate this in the music is a recording of the sea, gently brushing the Tanzanian shore on an early morning. Apart from that, there is a drone-like sound which high frequencies are dynamically filtered. There is also a metaphorical wave of 'question-and-answer' between a synthesizer chord and a trumpet note, both in turn swelling and fading out.

The time between the notes of the broken chords of the piano decreases as we reach the first centripetal moments. We then reach a point corresponding to a section in the painting where I interpreted the shapes in the painting to be more arbitrarily connected. For example, the brown smears in the top-left corner are the bass notes floating by, which you can hear between 2.41 - 3.09. At 2.59 the piano starts a broken melody that is repeated later in the piece at 6.47. I use this moment to introduce a very close-up sound again, as in the other pieces. This sound consists of a fusion between the crackling vinyl sounds and the piezo-microphone that is attached on a plastic bottle. This auditory stream illusion is analogous to how multiple colours group together to create a new shape in the painting. The piano starts morphing into the same anticipating gesture as before (3.14 - 3.52), accompanied by multiple wave-like sounds. The last section in the piece (which covers the bottom blue rectangle in Figure 6) is quite static, resembling the horizontal lines at the bottom of the painting. At the bottom is a brown line, that is represented by the bass drone again (5.10). An atmosphere of static entities that emerge in turn establish a blissful moment of transcendence. The piano returns with the same melody as before (6.47), but disrupts the current harmony to create an unstable sensation. This is to contrast the blissful moment of before and introduce a sense of melancholy. A brown stroke of paint rises horizontally at the bottom-right edge of the canvas. This is where the bass joins the established palette again (7.40) and the piece dissolves in the distance.

Focus

Just as the waves keep emerging and collapsing perpetually at the surface of the sea, I wanted to create a similar motion in sound. I found that designing a similar circular gesture had to do with expanding and contracting of time within the sound. In “*Catalina 1943*” (Loscil, 2014, track 7) Loscil uses a bass event to trigger a change in parameters of other layers, for example the LFO rate of a filter on a noisy layer of sound. I wanted to incorporate the same effect in this piece to simulate the wave patterns.

There are three sounds that portray this the best:

1. Dynamic piano fractures (Audio Example 21)
2. Cracking wood (Audio Example 22)
3. Processed Cymbals (Audio Example 7)

Each of these portray different important parts of my compositional techniques. The glitchy prepared piano sounds are granulations of the recorded prepared piano. I recycle the sound into a new timbre to weave the moments in the piece together. But the more important part was that I created a way to increase and decrease the time between the grains. This generated this pushing and pulling sound.

The cracking wood is something I found by accident while recording the piano in St. Pauls Hall in Huddersfield. I was walking across the floor and the old wood of the church cracked and its reflections were scattered beautifully throughout the Hall. I put one the microphone really close to the source and a stereo pair to record the space. While listening to the rhythm of the piece, I rocked the weight of my body back and forth between two close points on the ground. This way I mimicked the expanding and contracting gesture I had already designed from the piano recordings. The wood accidentally gives birth to a subliminal image of a boat lying in the bay. I love the way the sound found its way into the piece. The cymbals are recorded in st. Pauls as well and are always anticipating the peak of a wave. At 6.06 you can hear how a contracting gesture emerges, at its climax, we hear the cymbal contrasting the gesture by decreasing the rate of its low-pass filter.



Figure 7

4.3.4 Painting 4 / *Edgelines*

Distant

Edgelines is a reference to the psychogeographic term: Edgelands. It is the transitional area between industrial suburbs and verdant natural landscapes (Burnside, 2011). Often when I go hiking or when the train passes through these ‘non-spaces’, I sense a dystopian ambience where time stands still, magnifying the borders of civilization. This imperfect land, that looks decayed but is in fact transforming is beautiful in its instability.

Painting 4, with its blurred borders between dark and melancholic colours fits this atmosphere perfectly. From a large distance the painting has three main colours: teal, raisin brown and broken white. The gradual transitions between those three areas in the painting is what I wanted to achieve with this piece. The painting lacks complexity and shapes and appears very static, almost as if a picture is taken while quickly turning to horizontally so that every object in the picture is smeared out. To magnify this fraction of a second, I wanted to experiment with vertical time by creating narrative not through time but the dimension of space.

Again, I mapped the brightness of the color to the ‘brightness’ of the timbre, in other words, its frequency characteristics. The music covering the teal green section would begin and end the piece, with a dark, rumbling section in the middle and a short high frequency timbre just before the end. This is because in proportion to the other colours, the broken white is the thinnest.

Intermediate

Apart from the obvious choice of static sounds to mimic the static pattern of the painting, I composed a loop for the thumb piano. This is to emphasize the symbolic repetitiveness of a straight line, which can be seen as a multitude of points in time, never changing direction.

I read the painting from top to bottom and divided it in three sections. The sound gradually drowns in the low-frequency layers that resemble the raisin brown area. Layers that are more prominent during this section can be heard earlier in the piece, just as some layers of paint are shrouded under others. In Audio Example 23 you can hear the fireworks faintly in the background for example. They return more prominent in the middle section of the piece. The thumb piano has a timbre that is very mellow and round, it lacks edgy high frequencies or disorienting low frequencies. It is therefore quite easy on the ear. In colour, if yellow and blue (two of the three primary colours) could be represented as respectively high and low frequency sounds because of their contrast to each other, then green (the exact blend of yellow and blue) would be the middle in between, the mid-frequency spectrum. I decided therefore that the thumb piano with its mellow sound would be a good choice for instrumenting the teal section.

The depth of the painting lies more in the gradual fluctuation in color, than in depth in texture. Likewise, the sounds in this piece fluctuate either subtly in pitch, equalization, amount of reverb or volume.

The middle section of the piece is very dense with multiple sounds superimposed on top of one another: the engine of a large ferry, fireworks, and the recording of a waterfall in Iceland. The spaces captured on these three spaces are merged into a new otherworldly one. To enhance the sense of a single stream of sound it is processed by a lot of compression to reduce the dynamic range. Now small details become almost evenly loud as sudden, loud events. Saturation adds upper harmonics to the sound and distorts it to create the desired lo-fi effect. The final addition of delay makes the sound more ambiguous because of the superimposition of its delayed signals. This symbolizes the way darkness obscures objects in a space.

To prevent the piece from becoming three disparate panels of sound, most layers return in multiple sections, mostly in a different spatial configuration. For example, the bell-like piano iterations that are heard just before the transformation into the middle section (at 2.47), return reversed and filtered in the middle of the piece with a large amount of delayed feedback (at 4.28).

Focus

In this painting the focus wasn't so much on specific objects in the painting. It had more to do with the subtle transition between sections. Apart from volume and filtering I used effects dynamically to move from the sections in the music that represent the lighter versions of the colour in the painting to the most dark and vice versa. In Audio Example 24 I extracted the noise layer from the piece to show the gradual increase of distortion and compression to create a strong

oppressive wall of sound, to emphasize how the dark brown colour in the painting is taking over the teal green, increasing in darkness.

The music represents the intersection of teal green and brown by incorporating fleeting crackling textures. This starts around 1.20. Just as in the sounds that cover shape 1 in Painting 2 (page 30 to 33), they are a combination of four different versions, each with a slightly darker timbre than the last. Although this sound is not directly mapped to a colour in the painting, it adds to the transition into a darker colour. The way the sound evolves in texture can be heard isolated in Audio Example 25.

In the section representing the broken white region of the painting, mostly mid to high frequency sounds are heard. Layers with dark timbres are now concealed under sounds such as a recording of a fluttering fence in the Peak District processed through high pass filters. One of the prominent layers in this section is the combination of two EMS VCS3s from the University of Huddersfield. On one of them I designed a complex, irregular sound through modulation of the filter, pitch and amplitude. I connected this signal to the other spring reverb to create a large amount of reverb. The result is an industrial sound of random glitches in a large space. By occasionally tapping on the chassis of the synths, the springs would bend and that created a shift in pitch. This adds to the imperfection in the sound. With real time adjustments of the settings on the Synthesizers, I made the expanding-contracting gestures that are similar to the sounds in the music of Painting 3. They mimic the break out of a colour into a new one. In Audio Example 26 you can hear this gesture.

5. Conclusion

In order to create music that touches on the sublime and create a loss of self in the listener, my music consists of dense layers of textures, slowly moving and developing through virtual spaces. In abstract paintings I found strategies to develop the music through the interaction of layers and their characteristics. Granular Synthesis provided novel results in shaping sound through control of those characteristics. It enabled sustaining sounds and creating glitchy textures to enhance a sense of instability and alteration in perception of time. Through the recording of different objects and spaces I was able to create pieces with complex virtual spaces and textures. The dark and gritty textures invoke a sense of introspection and keeps the listener engaged.

Although *Hallers Routine* did not meet my aesthetic aims, it felt very exciting to perform and to be able to work with other disciplines. *Exgrain* provided me with a similar experience and those pieces came closest to a loss of self and flow through performing.

The amount of improvisation and freedom in the compositional process of working in the studio and crafting these pieces of *Expired Sceneries* through paintings was minimal. It is important for me in my work to always incorporate a sense of live interaction with a piece, even when it is finished, there should be room for uncertainty while performing. A live performance of *Expired Sceneries* could give birth to strategies of opening up parts and layers of the pieces that are suitable for performance. I am very excited how the pieces turned out aesthetically, so a combination of the aesthetics with new strategies for performance would be a logical next step.

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